

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	569	(604/191).OCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2011/04/19 12:23
S1	99	(US-20050154353-\$ or US-20060247582-\$ or US-20070179452-\$ or US-20080021414-\$ or US-20080262439-\$ or US-20040127859-\$ or US-20050063857-\$ or US-20050065478-\$ or US-20050065479-\$ or US-20060030820-\$ or US-20060100590-\$ or US-20060100591-\$ or US-20080119794-\$ or US-20080221531-\$ or US-20080319400-\$ or US-20020099333-\$ or US-20020107485-\$ or US-20030120255-\$ or US-20040116872-\$ or US-20050245880-\$ or US-20080300550-\$ or US-20080300551-\$ or US-20060142701-\$ or US-20010021820-\$ or US-20080015539-\$ or US-20020000253-\$).did. or (US-20040254525-\$ or US-20060173439-\$ or US-20080086091-\$).did. or (US-7048720-\$ or US-7331942-\$ or US-6361524-\$ or US-6743216-\$ or US-6997910-\$ or US-5941850-\$ or US-5279317-\$ or US-5511568-\$ or US-5573525-\$ or US-5598939-\$ or US-5755894-\$ or US-7101354-\$ or US-5047017-\$ or US-4932944-\$ or US-5522804-\$ or US-5697915-\$ or US-5769825-\$ or US-6228065-\$ or US-6723074-\$ or US-5203775-\$ or US-RE35841-\$ or US-5611782-\$ or US-5755696-\$ or US-5807374-\$ or US-5928215-\$ or US-6013037-\$).did. or (US-5019041-\$ or US-5318533-\$ or US-5324256-\$	US-PGPUB; USPAT	ADJ	ON	2009/07/28 16:53

		or US-5429606-\$ or US-5447495-\$ or US-5685848-\$ or US-5718239-\$ or US-5741229-\$ or US-5752935-\$ or US-5873841-\$ or US-5893845-\$ or US-5512054-\$ or US-5961472-\$ or US-6224561-\$ or US-5024668-\$ or US-5421334-\$ or US-6481462-\$ or US-5609580-\$ or US-5506142-\$ or US-4500310-\$ or US-4543093-\$ or US-4994043-\$ or US-5489266-\$ or US-5829589-\$ or US-5873462-\$ or US-5964737-\$ or US-4599082-\$). did. or (US-4613326-\$ or US-4758230-\$ or US-4865592-\$ or US-4929232-\$ or US-4961728-\$ or US-4964866-\$ or US-4973310-\$ or US-5188597-\$ or US-5273543-\$ or US-5308330-\$ or US-5308341-\$ or US-5439450-\$ or US-5533970-\$ or US-5601077-\$ or US-5607400-\$ or US-5713857-\$ or US-5746733-\$).did.				
S2	1158574	syringe or inject\$3	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/29 14:58
S3	278763	plunger	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/29 14:58
S4	152289	stopper	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/29 14:58
S5	3004189	gap or air	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/29 14:59
S6	1991106	spring	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/29 14:59
S7	243719	coil spring	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/29 14:59
S8	5308	S2 and S3 and S4	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/29 14:59
S9	3	((("4312344") or ("5496285") or ("4500310")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/07/29 15:01
S10	0	("wo3093108").PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2009/07/29 15:01
S11	0	("comar").PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2009/07/29 15:02

S12	317	comar	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/29 15:02
S13	3760	S8 and (@ad< "20040109" or @rlad< "20040109")	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/29 15:04
S14	22128	S4 same S5	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/29 15:04
S15	33020	positive displacement	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/29 15:05
S16	67	S13 and S15	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/29 15:05
S17	839	S13 and S14	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/29 15:05
S18	1902	S13 and S6	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/29 15:05
S19	422	S18 and S7	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/29 15:05
S20	96	S19 and S17	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/29 15:31
S21	433	hollow stopper	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/29 18:33
S22	14	S21 and syringe and plunger	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/29 18:33

S23	47	("0422437"   "2737946"   "2895773"   "3135260"   "3628523"   "3635218"   "3828778"   "4008718"   "4057052"   "4074715"   "4180069"   "4236516"   "4266557"   "4303070"   "4354507"   "4704105"   "5061252").PN. OR ("4312344"   "4500310"   "5496285").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/29 18:34
S24	39	S23 and (@ad<"20040109" or @rlad<"20040109")	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/29 18:35
S25	291	("0511600"   "0729835"   "0782723"   "1165686"   "1222424"   "1453418"   "1707880"   "1737844"   "1948982"   "20010041867"   "20040010235"   "20040024366"   "20040127859"   "2607342"   "2856923"   "2882899"   "2886034"   "2895773"   "2902034"   "2907330"   "2923442"   "2955728"   "3026872"   "3028862"   "3029985"   "3050059"   "3059639"   "3135260"   "3147753"   "3150801"   "3174655"   "3176595"   "3250443"   "3253592"   "3281023"   "3331537"   "3331538"   "3366103"   "3373999"   "3535068"   "3581956"   "3595449"   "3669111"   "3705582"   "3766918"   "3834387"   "3885710"   "3890956"   "3901402"   "3930492"   "3939833"   "3967759"   "3993061"   "3998224"   "4030496"   "4041934"   "4057052"   "4074715"   "4159713"   "4178941"   "4201209"   "4212307"   "4212309"   "4215701"   "4216771"   "4236516"   "4245654"   "4266557"   "4267846"   "4299238"   "4303070"   "4312344"   "4320770"   "4327745"   "4333457"   "4340067"   "4354507"   "4363329"   "4372325"   "4373535"   "4405308"   "4411725"   "4421123"   "4448206"	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/29 18:53

		"4459997"   "4466446"   "4469482"   "4492576"   "4493703"   "4500310"   "4519402"   "4543093"   "4548607"   "4572210"   "4595021"   "4599082"   "4610669"   "4615341"   "4632672"   "4657028"   "4660569"   "4687000"   "4690154"   "4699615"   "4701165"   "4703763"   "4704105"   "4767414"   "4774963"   "4820278"   "4821738"   "4852768"   "4886493"   "4898583"   "4898585"   "4932941"   "4950231"   "5007904"   "5037393"   "5053031"   "5061243"   "5085644"   "5098402").PN. OR ("5120314"   "5135489"   "5147328"   "5152753"   "5232448"   "5236420"   "5254093"   "5257976"   "5284132"   "5314416"   "5377689"   "5383864"   "5397313"   "5419772"   "5458576"   "5496285"   "5527285"   "5531255"   "5540660"   "5586975"   "5637092"   "5695465"   "5707361"   "5735825"   "5766157"   "5785682"   "5795337"   "5807374"   "5836919"   "5840076"   "5891052"   "5899881"   "5902271"   "5902276"   "5938637"   "6050957"   "6086569"   "6171287"   "6196997"   "6213980"   "6213985"   "6361524"   "6368303"   "7104970"   "D248873"   "D254446"   "Re32974").PN. OR ("4266557"   "4354507"   "4678107"   "5314416"   "5411488"   "5620423"   "5795337"   "6322542"   "6511459"   "6562009"   "7087037"   "7331942"   "7534233").URPN.				
S26	216	S25 and (@ad<"20040109" or @rlad<"20040109")	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/29 18:53

S27	39	S2 and S26 and S3 and S4	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/29 18:53
S28	54	(US-20080319400-\$ or US-20080300551-\$ or US-20080300550-\$ or US-20080262439-\$ or US-20080221531-\$ or US-20080119794-\$ or US-20080021414-\$ or US-20070179452-\$ or US-20060247582-\$ or US-20060173439-\$ or US-20060142701-\$ or US-20060100591-\$ or US-20060030820-\$ or US-20050154353-\$ or US-20050065478-\$ or US-20050063857-\$ or US-20040127859-\$ or US-20030120255-\$ or US-20010021820-\$ or US-20060229569-\$ or US-20090157039-\$).did. or (US-7331942-\$ or US-7101354-\$ or US-7048720-\$ or US-6723074-\$ or US-5769825-\$ or US-5713857-\$ or US-5697915-\$ or US-5308330-\$ or US-4500310-\$ or US-5496285-\$ or US-4312344-\$ or US-6228065-\$ or US-6126643-\$ or US-7534233-\$ or US-7087037-\$ or US-6562009-\$ or US-6511459-\$ or US-6322542-\$ or US-5795337-\$ or US-5620423-\$ or US-5411488-\$ or US-5314416-\$ or US-4678107-\$ or US-4354507-\$ or US-4266557-\$ or US-7351228-\$).did. or (US-6796217-\$ or US-4236516-\$ or US-3939833-\$).did. or (US-3084688-\$).did. or (WO-0018453-\$ or WO-0047265-\$ or WO-03093108-\$).did.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/30 13:14
S29	40	S28 and (@ad<"20040109" or @rlad<"20040109")	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/30 13:14
S30	1991943	spring	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/30 14:14
S31	7	S29 and S30	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/30 14:14

S32	1159626	syringe or inject\$3	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/30 14:15
S33	278850	plunger	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/30 14:15
S34	152403	stopper	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/30 14:15
S35	243779	coil spring	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/30 14:15
S36	184	S32 and S33 and (S34 same S35)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/30 14:15
S37	123	S36 and (@ad< "20040109" or @rlad< "20040109")	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2009/07/30 14:15
S38	193	("0422437"   "0511600"   "0729835"   "0782723"   "1222424"   "1563627"   "1707880"   "1948982"   "2419401"   "2575425"   "2737946"   "2895773"   "2902034"   "3045674"   "3135260"   "3176595"   "3331538"   "3625213"   "3628523"   "3635218"   "3669111"   "3678930"   "3705582"   "3766918"   "3828778"   "3834387"   "3885710"   "3890956"   "3901402"   "3939833"   "3949751"   "3967759"   "3986645"   "3998224"   "4008718"   "4030496"   "4057052"   "4074715"   "4153186"   "4180069"   "4215701"   "4216771"   "4236516"   "4266557"   "4299238"   "4303070"   "4306554"   "4333457"   "4344573"   "4354507"   "4363329"   "4492576"   "4500310"   "4599082"   "4610669"   "4615341"   "4620847"   "4660569"   "4678107"   "4701165"   "4704105"   "4723691"   "4820278"   "4852768"   "4932941"   "4962868"   "4986820"   "5007904"   "5061252"   "5215221"   "5239991"   "5254093"   "5307953"   "5314416"   "5331954"   "5349947"   "5377689"   "5383864"   "5429122"   "5458576"   "5496285"   "5513630"   "5524613"   "5533505"	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/03/27 15:37

		"5542412"   "5547131"   "5570686"   "5601077"   "5620423"   "5630796"   "5702362"   "5797392"   "5819730"   "5881719"   "5881720"   "5894967"   "5899880"   "6016800"   "6029657"   "6041775"   "6209538"   "6220243"   "6227195"   "6443152"   "6530371"   "9956807"   "Re32974").PN. OR ("2005/0063857"   "4312344"   "4500310"   "5411488"   "5496285"   "5620423"   "5795337"   "6644309"   "6796217"   "7087037").URPN.				
S39	153	S38 and (@ad< "20040109" or @rlad< "20040109")	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2010/03/27 15:49
S40	164337	syringe	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/03/27 16:15
S41	230	plunger near2 twist\$2	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/03/27 16:15
S42	76	S40 and S41	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/03/27 16:15
S43	60	S42 and (@ad< "20040109" or @rlad< "20040109")	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2010/03/27 16:15
S44	2	(( "5318588" ) or ( "6514280" ) ). PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/03/27 17:24
S45	205	("0422437"   "0511600"   "0729835"   "0782723"   "1222424"   "1563627"   "1707880"   "1948982"   "2419401"   "2575425"   "2737946"   "2895773"   "2902034"   "3045674"   "3135260"   "3176595"   "3331538"   "3625213"   "3628523"   "3635218"   "3669111"   "3678930"   "3705582"   "3766918"   "3828778"   "3834387"   "3885710"   "3890956"   "3901402"   "3939833"   "3949751"   "3967759"   "3986645"   "3998224"   "4008718"   "4030496"   "4057052"   "4074715"   "4153186"   "4180069"   "4215701"   "4216771"   "4236516"   "4266557"	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/17 22:14



		"4299238"   "4303070"   "4306554"   "4333457"   "4344573"   "4354507"   "4363329"   "4492576"   "4500310"   "4599082"   "4610669"   "4615341"   "4620847"   "4660569"   "4678107"   "4701165"   "4704105"   "4723691"   "4820278"   "4852768"   "4932941"   "4962868"   "4986820"   "5007904"   "5061252"   "5215221"   "5239991"   "5254093"   "5307953"   "5314416"   "5331954"   "5349947"   "5377689"   "5383864"   "5429122"   "5458576"   "5496285"   "5513630"   "5524613"   "5533505"   "5542412"   "5547131"   "5570686"   "5601077"   "5620423"   "5630796"   "5702362"   "5797392"   "5819730"   "5881719"   "5881720"   "5894967"   "5899880"   "6016800"   "6029657"   "6041775"   "6209538"   "6220243"   "6227195"   "6443152"   "6530371"   "9956807"   "Re32974").PN. OR ("2005/0063857"   "4312344"   "4500310"   "5411488"   "5496285"   "5620423"   "5795337"   "6644309"   "6796217"   "7087037").URPN.				
S46	163194	stopper	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/17 22:32
S47	936207	projection	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/17 22:32
S48	846	interior same S46 same S47	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/17 22:32

**EAST Search History (Interference)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	0	(604/191).CCLS.	UPAD	OR	OFF	2011/04/19 12:23

**4/ 19/ 2011 12:23:48 PM****C:\ Documents and Settings\ iholloway\ My Documents\ EAST\ Workspaces\ app10594335.wsp**